



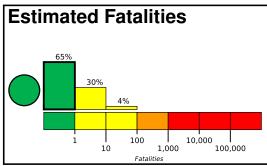
# ANSS MM

**PAGER** Version 3

Created: 2 hours, 8 minutes after earthquake

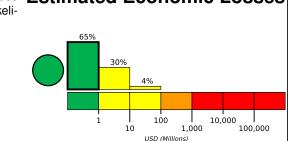
## M 4.2, 4 km SSW of Lima, Montana

Origin Time: 2023-07-14 22:26:08 UTC (Fri 16:26:08 local) Location: 44.5962° N 112.6043° W Depth: 10.0 km





Green alert for shaking-related fatalities Estimated Economic Losses and economic losses. There is a low likelihood of casualties and damage.



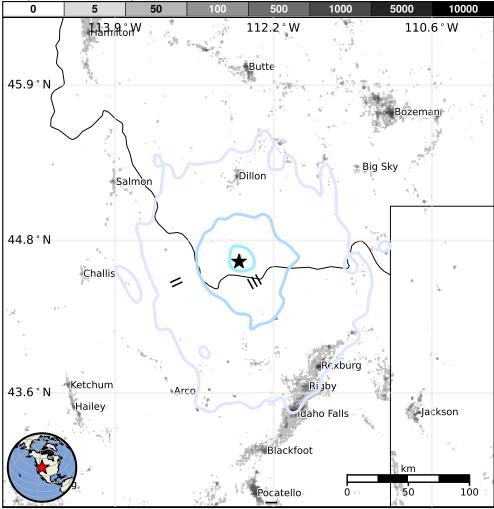
**Estimated Population Exposed to Earthquake Shaking** 

ESTIMATED POPULATION EXPOSURE (k=x1000)		483k	187k	0	0	0	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	11-111	IV	V	VI	VII	VIII	IX	X+
PERCEIVE	SHAKING	Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
DAMAGE	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

<sup>\*</sup>Estimated exposure only includes population within the map area.

#### Population Exposure

population per 1 sq. km from Landscan



#### PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.

#### **Structures**

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are unreinforced brick masonry and reinforced masonry construction.

### **Historical Earthquakes**

Date	Dist.	Mag.	Max	Shaking
(UTC)	(km)		MMI(#)	Deaths
1984-08-22	106	5.5	V(3k)	_
1994-02-03	241	5.8	VIII(1k)	_
1983-10-28	111	6.9	VII(2k)	2

Recent earthquakes in this area have caused secondary hazards such as landslides that might have contributed to losses.

#### **Selected City Exposure**

from GeoNames.org				
MMI	City	Population		
П	Dubois	1k		
II	Dillon	4k		
П	Sugar City	2k		
II	Saint Anthony	4k		
II	Rexburg	25k		
II	Rigby	4k		
I	Idaho Falls	57k		
I	Butte	34k		
I	Butte-Silver Bow (Balance)	34k		
I	Pocatello	54k		
1	Bozeman	37k		

bold cities appear on map.

(k = x1000)

Event ID: us7000kfv7 http://earthquake.usgs.gov/data/pager/